

REMARKS

Claims 1 and 3-20 are now pending in the application. Claims 1 and 3-20 are rejected under 35 USC 103(a). In this Response, Claims 1, 6, and 13 are each amended. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) to the claims and the Final Rejection in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1 and 3-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over (in the case of Claims 1, 3, 5-6, 8-9, 11-13, 15, and 17-20) Young et al (U.S. Pat. No. 5,353,121) in view of Houser et al (U.S. Pat. No. 5,774,859) and further in view of Coughlin (U.S. Pat. No. 5,878,386); (in the case of Claims 4 and 16) Young et al (U.S. Pat. No. 5,353,121) in view of Houser et al (U.S. Pat. No. 5,774,859) and further in view of Coughlin (U.S. Pat. No. 5,878,386) and further in view of Ohno ((U.S. Pat. No. 5,761,371); and (in the case of Claims 7, 10, and 14) Young et al (U.S. Pat. No. 5,353,121) in view of Houser et al (U.S. Pat. No. 5,774,859) and further in view of Coughlin (U.S. Pat. No. 5,878,386) and further in view of Schein ((U.S. Pat. No. 6,075,575) . These rejections are respectfully traversed.

Each of Independent Claims 1 and 13 (all pending Independent Claims) has been amended to clarify use by the dialog system of a dialog history data file (storing a log of conversational data derived from previous spoken requests) as the system interacts with the user. None of the cited references suggest such an approach.

The dialog history data file allows the dialog system to process user commands that are far more semantically complex than the comparatively simple navigation commands handled by the cited prior art systems. For example, using the applicants' system, consider a

spoken request such as, "I'd like to watch another Marilyn Monroe movie." If the user has previously rejected the movie "Some Like It Hot," that fact is stored in the dialog history data file. The dialog manager will then select a Marilyn Monroe movie other than "Some Like It Hot." Support for the above amendment may be found in the specification at page 10, lines 2-16, and in Figure 2 at elements 130 and 167.

Applicants, accordingly, respectfully request reconsideration and withdrawal of the rejections under 35 USC 103(a) and the Final Rejection and admission of these amendments.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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ATTACHMENT FOR SPECIFICATION AMENDMENTS

The following is a marked up version of each replacement paragraph and/or section of the specification in which underlines indicates insertions and brackets indicate deletions.

In the paragraph of the specification which commences at page 8, line 10 and continues to page 8, line 20:

-- The local parser **160** utilizes in the preferred embodiment small and multiple grammars along with several passes and a unique scoring mechanism to provide parse hypotheses. For example, the novel local parser **[102]160** recognizes according to this approach phrases such as dates, names of people, and movie categories. If a speaker utters "record me a comedy in which Mel Brooks stars and is shown before January 23rd", the local parser recognizes: "comedy" as being a movie category; "January 23rd" as a date; and "Mel Brooks" as an actor. The global parser assembles those items (movie category, date, etc.) together and recognizes that the speaker wishes to record a movie with certain constraints. --

In the paragraph of the specification which commences at page 9, line 5 and continues to page 9 line 15.

-- The preferred embodiment encodes the semantics via a frame data structure **164**. The frame data structure **164** contains empty slots **166** which are filled when the semantic interpretation of global parser **162** matches the frame. For example, a frame data structure (whose domain is tuner commands) includes an empty slot for specifying the viewer-requested channel for a time period. If the viewer **[120]** has provided the channel, then that empty slot is

filled with that information. However, if that particular frame needs to be filled after the viewer has initially provided its request, then dialog manager 130 instructs the computer response module [134] to ask the viewer [120] to provide a desired channel. –

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

1. ([Thrice]Four Times Amended) An interactive replay system for organizing recorded items of program content, the system having access to an electronic program content, comprising:

a memory having a data structure for storing at least one recorded item of program content in association with at least one electronic program guide attribute selected from the group consisting of program title information, program category, broadcasting network, date of broadcast, time of broadcast, actors and director;

a file write mechanism that automatically accesses the electronic program guide attribute information about the recorded item of program content to be stored in said data structure;

a speech recognizer that receives a spoken request for the recorded item of program content and generates an input sentence corresponding to the spoken request, where the spoken request includes at least one electronic program guide attribute associated with the recorded item of program content;

a natural language parser that receives the input sentence from the speech recognizer and identifies the at least one electronic program guide attribute from the input sentence, wherein said natural language parser includes a set of stored grammars that extracts meaning from said spoken request; [and]

a dialog history data file in said memory for storing a log of conversational data derived from previous spoken requests; and

a dialog system that interacts with a user and with said dialog history data file to ascertain additional electronic program guide attributes for the recorded item of program content.

13. (~~[Thrice]~~Four Times Amended) An interactive replay system for accessing recorded items of program content, comprising:

an electronic program guide for storing electronic program guide information for items of program content;

a memory having a data structure for storing at least one recorded item of program content in association with corresponding electronic program guide information;

a file write mechanism that accesses the electronic program guide and stor[ing]es electronic program guide information for the at least one recorded item of program content in the data structure of the memory;

a speech recognizer that receives a spoken request for a specific recorded item of program content and generates an input sentence corresponding to the spoken request, where the spoken request includes electronic program guide information associated with the specific recorded item of program content;

a natural language parser that receives the input sentence from the speech recognizer and identifies the electronic program guide information embodied in the input sentence, wherein said natural language parser includes a set of stored grammars that extracts meaning from said spoken request; [and]

a dialog history data file in said memory for storing a log of conversational data derived from previous spoken requests; and

a dialog system that interacts with a user and with said dialog history data file to ascertain additional electronic program guide attributes for the recorded item of program content.